

1-1-2003

Enforcing Environmental Norms: Diplomatic and Judicial Approaches

Nicholas A. Robinson

Elisabeth Haub School of Law at Pace University, nrobinson@law.pace.edu

Follow this and additional works at: <http://digitalcommons.pace.edu/lawfaculty>



Part of the [Environmental Law Commons](#), and the [International Law Commons](#)

Recommended Citation

Nicholas A. Robinson, Enforcing Environmental Norms: Diplomatic and Judicial Approaches, 26 Hastings Int'l & Comp. L. Rev. 387 (2003), <http://digitalcommons.pace.edu/lawfaculty/370/>.

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace Law Faculty Publications by an authorized administrator of DigitalCommons@Pace. For more information, please contact cpittson@law.pace.edu.

Enforcing Environmental Norms: Diplomatic and Judicial Approaches

By NICHOLAS A. ROBINSON*

Since the 1972 U.N. Conference on the Human Environment,¹ the world has witnessed an unprecedented period of environmental law making. In the space of one generation, through both national legislation and international agreements, nations have established norms and a framework for environmental stewardship of the Earth. The norms are embodied in the still-young field of environmental law, a body of law which now exists within every nation and permeates much of public international law. The norms reflected in environmental law may not yet embrace fully Aldo Leopold's "Land Ethic"² as a rule of law,³ but they have established the juridical

* Gilbert & Sarah Kerlin Distinguished Professor of Environmental Law, Center for Environmental Legal Studies, Pace University School of Law.

1. The U.N. Conference on the Human Environment was held in Stockholm, Sweden, in 1972. It was the first time that the United Nations and the foreign ministries of the States Members of the United Nations considered environmental protection to be a geo-political priority. On June 16, 1972, the conference adopted the Declaration of Principles on the Human Environment. Stockholm Declaration of the United Nations Conference on the Human Environment, U.N. GAOR, 27th Sess., U.N. Doc. A/CONF.48/14/Rev 1, *reprinted in* 11 I.L.M. 1416 (1972) [hereinafter Stockholm Declaration], later confirmed by the U.N. General Assembly as a Resolution, G.A. Res. 2997 (XXVII). On its recommendation, the U.N. General Assembly established the United Nations Environment Programme (UNEP).

2. ALDO LEOPOLD, A SAND COUNTY ALMANAC, AND SKETCHES HERE AND THERE 203 (1949). In his essay *The Land Ethic*, Leopold writes about the concept of a community: "All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in that community, but his ethics prompt him also to co-operate (perhaps in order that there may be a place to compete for). The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land." *Id.* In the progressive development of social moral norms about nature, he identifies a parallel to the development of social norms. "Land-use ethics are still governed wholly by economic self-interest, just as social ethics were a century ago." He continues to explain why a "land ethic" must be the basis for human decision-making about natural resources: "[A] system of

framework from which the Land Ethic may emerge and come to be acknowledged. One sign of the acceptance and maturation of these norms is that nations now worry about how to enforce environmental law and how to achieve compliance with environmental laws and rules.

Enforcement of environmental laws is essential to attaining the international objective of sustainable development.⁴ To be effective, however, this enforcement must be routine, reasonably resourced and predictable—an arduous challenge. Even in the United States, with one of the most advanced environmental law regimes in the world, environmental enforcement does not consistently meet these criteria. Although *most* individuals, companies and governmental units strive

conservation based solely on economic self-interest is hopelessly lopsided. It tends to ignore, and thus eventually to eliminate, many elements in the land community that lack commercial value, but are (as far as we know) essential to its healthy functioning. It assumes, falsely, I think, that the economic parts of the biotic clock will function without the uneconomic parts. It tends to relegate to government many functions eventually too large, too complex, or too widely dispersed to be performed by government.” *Id.* at 204. These conclusions support Leopold’s articulation of a norm for human conduct, a golden rule based on ecological knowledge: “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise.” *Id.*

3. The “Land Ethic” has been accepted as a rule of law in several states. In Minnesota, the courts have observed that through enacting the Minnesota Environmental Rights Act, “our state legislature has given this land ethic force of law. Our construction of this Act gives effect to this broad remedial purpose.” *County of Freeborn v. Bryson*, 243 N.W.2d 316, 322 (Minn. 1976). *See also* *In re Christenson*, 417 N.W.2d 607, 615 (Minn. 1987), citing LEOPOLD, *supra* note 2, and noting the judicial duty to ensure that the land ethic was observed. *See also* *McLeod County Board of Comm’rs v. State*, 549 N.W.2d 630 (Minn. 1996). *Grube v. Daun* cites Leopold’s observations that despoliation of land violates the land ethic, and observes that “[t]he statutes under consideration are a legislative recognition that the discharge of hazardous substances is one form of despoliation. The legislature has enacted this law to correct that wrong.” 563 N.W.2d 523, 527 (Wisc. 1997). There are, of course, many other instances of judicial recognition of a land ethic, as in the court’s endorsement of “Florida’s overall policy of environmental stewardship” in *Dep’t of Cmty. Affairs v. Moorman*, 664 So. 2d 930 (Fla. 1995), or in the oft-cited dissents of Justice Blackmun and Justice Douglas in *Sierra Club v. Morton*, 405 U.S. 727 (1972).

4. The U.N. World Summit on Sustainable Development (WSSD) resolved to “assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection—at the local, national, regional and global levels.” *Johannesburg Declaration on Sustainable Development*, para. 5, Annex to Resolution 1, U.N. Report of the World Summit on Sustainable Development, U.N. Doc. A/CONF.199/20 (2002) (*Johannesburg Declaration*), available at <www.johannesburgsummit.org/html/documents/summit_docs/131302> (visited Oct. 12, 2003).

to comply with environmental laws *most of the time*, without regular enforcement some part of the public avoids or evades its duty to comply. Evasion is a problem for all law enforcement, but poses a greater threat in the context of environmental laws⁵ because the entire public will be harmed if any significant part does not join in observing the environmental norms.⁶ Environmental harm is cumulative and can be pervasive, and the weakest link can undermine responsible compliance by all others.

Environmental norms are observed *because they are* norms about how people respect each other and the natural systems that sustain human communities. Environmental norms are basic to human well-being. They arise out of the human condition, not unlike human rights laws. Environmental norms emerge from the fact that humans exist within ecosystems, and human society is embedded in the natural systems in which they have evolved; environmental norms are grounded in an objective reality, and scientists can measure the consequences of observing—or failing to observe—those norms. The provisions of environmental norms, therefore, exist not merely as pronouncements of governments, applied solely by the force of the state; legal positivists see norms as effective only if adopted as a law, and when backed by effect sanctions.⁷ Indeed, like other fundamental

5. For this reason, federal courts in the United States have deemed most criminal environmental law sanctions to be “public welfare offenses,” for which the prosecution need only prove that the accused knew he was doing the act that harmed the environment, and need not prove that the accused also knew the act violated the law. See *United States v. International Metals and Chemical Corp.*, 402 U.S. 558 (1971), and the discussion in John F. Cooney et. al., *Criminal Enforcement of Environmental Laws: Part II*, 25 ENVTL. L. REP. 10600 (1995).

6. The indivisibility of harm, on a global scale, is clearly illustrated by the unlawful release of chlorofluorocarbons (CFCs), which nations agreed to ban under the Vienna Convention for the Protection of the Ozone Layer, Sept. 22, 1988, 1513 U.N.T.S. 293, the Montreal Protocol, Apr. 5, 1989, 1522 U.N.T.S. 3, the London Agreement of June 23, 1990, amending the Montreal Protocol, UNEP/Oz.L.Pro.2/3 (Annex II), and the Copenhagen Agreement, 32 I.L.M. 874 (1993). Although most states and enterprises have stopped production and use of CFCs, there is an active black market in the sale of CFCs, and the U.S. Department of Justice regularly prosecutes those who unlawfully trade in or use CFCs. The United States banned the use of CFCs under the Clean Air Act amendments of 1990. 42 U.S.C. § 7671, et seq. Since CFCs take some ten years to migrate from the troposphere to the stratosphere, and the stratospheric ozone layer world-wide can be depleted by CFCs released from any place, no nation can protect its citizens from the ultraviolet solar radiation, which cause cataracts and skin cancer in humans when the ozone shield is degraded, unless all sources of CFC releases are contained.

7. See, e.g., Steven R. Ratner & Anne-Marie Slaughter, *Appraising the Methods of International Law: A Prospectus for Readers*, 93 AM. J. INT’L L. 291 (1999).

rights, the right to live in a sound environment is assumed by many to be a "given,"⁸ and some courts⁹ and many constitutions¹⁰ now recognize this right.

Evolving the Consensus on Environmental Norms

From both the diplomatic and the juridical perspectives, it is significant that environmental norms of relative similarity have

8. Chief Justice Hilario Davide Jr., writing for the court in *Oposa v. Factoran*, 224 SCRA 792 (1993), available at <www.lawphil.net> (visited October 11, 2003), wrote "Such a right belongs to a different category of rights altogether for it concerns nothing less than self-preservation and self perpetuation—aptly and fittingly stressed by the petitioners—the advancement of which may even be said to predate all governments and constitutions. As a matter of fact, these basic rights need not even be written in the Constitution for they are assumed to exist from the inception of humankind. If they are now explicitly mentioned in the fundamental charter, it is because of the well founded fear of the framers that unless the rights to a balanced and healthful ecology and to health are mandated as state policies by the Constitution itself, thereby highlighting their continuing importance and imposing upon the state a solemn obligation to preserve the first and protect and advance the second, the day would not be too far when all else would be lost not only for the present generation, but also for those to come—generations which stand to inherit nothing but parched earth incapable of sustaining life." *Oposa* is a decision sustaining claims by minors in the Philippines that timber concessions were depleting the last of the natural, primeval forests, and denying them their right to a balanced and healthy environment, as provided in the Constitution of the Philippines. The case is discussed in Ma Socorro Z. Manguiat and Vincent Paolo B. Yu III, *Maximizing the Value of Oposa v. Factoran*, 15 GEO. INT'L ENVTL. L. REV. 487 (2003).

9. See, e.g., *Mehta v. Nath*, (1977) 1 S.C.C. 388 (India).

10. See, e.g., constitutions assembled in the appendix to EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: THE INTERNATIONAL LAW, COMMON PATRIMONY AND INTERGENERATIONAL EQUITY (1989). The constitutional environmental norms are growing in number. Some eighty nations have amended their constitutions to provide a basic right to a sound environment. Even without such a clause, courts are finding that broad assurances of the duty to protect the public can be construed to meet new environmental harms. For instance, in *Farooque v. Bangladesh*, (1997) 17 B.L.D. (AD) 1, 1-33, reprinted in CAPACITY BUILDING FOR ENVIRONMENTAL LAW IN THE ASIAN AND PACIFIC REGION (Donna G. Craig et al. eds., 2002), the court adopted the rationale of Justice Douglas' dissent in *Sierra Club v. Morton*, 405 U.S. 727 (1972) with respect to standing for public interest litigation, and interpreted the Bangladesh Constitution to provide that the state has a duty to protect the health and well-being of the people and that a person may seek judicial review of the alleged actions. Justice Latifur Rahman: "The operation of Public Interest Litigation should not be restricted to the violation of the defined fundamental rights alone. In this modern age of technology, scientific advancement, economic progress and industrial growth the socioeconomic rights are under phenomenal change. New rights are emerging which call for collective protection and therefore we must act to protect all the constitutional, fundamental and statutory rights as contemplated within the four corners of our Constitution."

become accepted worldwide. This acceptance produces a growing consensus on the need for observing the norms, and for enforcing the law against those who do not. As a prologue to the patterns of environmental law enforcement, it is useful to understand how the norms became identified and how a consensus favoring acceptance of these norms evolved.

On the international plane, environmental norms have matured over three decades of debate. The elaboration and acceptance of these norms can be traced through the adoption of several "soft law" instruments. Since their initial adoption in the 1972 Stockholm Declaration on the Human Environment,¹¹ environmental norms have been revisited in several international restatements. The U.N. World Charter for Nature,¹² adopted by the U.N. General Assembly in 1982 was prepared initially by the International Union for the Conservation of Nature and Natural Resources (IUCN).¹³ IUCN also

11. See Stockholm Declaration, *supra* note 1. Principle 21 of the Stockholm Declaration provides: "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." *Id.* This principle is reflected in the Trail Smelter Case (U.S. v. Can.), 3 R.I.A.A. 1905 (1938). See the discussion of the principle under Section 601 of the AMERICAN LAW INSTITUTE, RESTATEMENT OF THE LAW—THE FOREIGN RELATIONS LAW OF THE UNITED STATES 103-107 (1987).

12. World Charter for Nature, October 28, 1982, G.A. Res. 7 U.N. GAOR 37th Sess. (1982), available at <www.un.org/documents/ga/res/37/a37r007.htm>. The United States cast the only negative vote in the General Assembly, objecting to the use of the word "shall" in the Charter, and urging instead the word "should." *Id.*

13. IUCN, founded in 1948, is the oldest international organization concerned with environmental conservation. It has a hybrid constitution, being both an inter-governmental organization—with the largest number of State Members of any Observer Organization in the U.N. General Assembly, some seventy-five nations, including the United States—and an association of (1) ministries of the environment (including the U.S. Environmental Protection Agency, U.S. National Parks Service, and U.S. Fish & Wildlife Service), and (2) non-governmental organizations (including 480 international and national NGO members). IUCN has six expert commissions, and the Commission on Environmental Law was established in 1965 and works with eight hundred individual experts in some 134 nations). For further information, see <www.iucn.org>. IUCN's Commission on Environmental Law (CEL) has specialist groups of experts on both compliance and enforcement, and on the role of the judiciary in relation to environmental law. A drafting group of the commission prepared the first drafts of the World Charter for Nature. See World Charter for Nature, *supra* note 12. This author served on the IUCN CEL drafting group, chaired by Dr. Wolfgang E. Burhenne, that prepared the text of the World Charter for Nature, and consulted with UNEP and the U.N. Member States on its adoption by the U.N. General Assembly.

prepared, in partnership with the U.N. Environment Programme (UNEP), a blueprint for environmental values called "Caring for the Earth."¹⁴ This document was endorsed by the IUCN General Assembly, and was the introduction of the concept of sustainable development to the international debate over environmental norms. The norm of sustainable development was repeated and subsequently defined by the U.N. World Commission on Environment and Development (the Brundtland Commission) in 1987:

"In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations."¹⁵

As a result of the Brundtland Commission report, the U.N. General Assembly decided to convene an international summit meeting on the theme of sustainable development. The concept of sustainable development was then embraced fully in the Declaration of Rio de Janeiro on Environment and Development (Rio Declaration),¹⁶ and in Agenda 21,¹⁷ both of which were adopted in

14. CARING FOR THE EARTH: A STRATEGY FOR SURVIVAL 12-13 (Roger Few ed., 1991). Sustainable development "refers to improving the quality of human life while at the same time living within the carrying capacity of supporting ecosystems." The first chapter urges that "[l]iving sustainably must become a principle for everybody. . . . The goal . . . may seem visionary today, but it is attainable." *Id.*

15. THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, OUR COMMON FUTURE 46 (1987). Former Norwegian Prime Minister Gro Harlem Brundtland was the chair of the Commission.

16. Rio Declaration on Environment and Development, adopted at the U.N. Conference on Environment and Development (UNCED) on June 13, 1992, U.N. Doc. A/CONF.151/26 (vol. 1) (1992) [hereinafter Rio Declaration], endorsed by the U.N. General Assembly, G.A. Res. 47/190 (1992), and repeated the importance of sustainable development in Principle 1 by reciting that "Human beings are at the center of concerns for sustainable development." In Principle 4 the Rio Declaration stressed that "In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it." *Id.*

17. Agenda 21, adopted by UNCED, U.N. Doc. A/CONF.151/26 (vols. 1-3) (1992), accepted by the U.N. General Assembly in G.A. Res. 47/190 (1992). In paragraph 1.1, Agenda 21 calls for a global partnership for "sustainable development." One of the premises to Agenda 21 is that national and international management of resources and environmental conditions has become the province of a set of separate sectors (e.g., agriculture is one sector, water resources another sector, and each narrowly focuses on the needs of its sector while neglecting its interdependence upon other sectors). Each sector can jealously defend its authority, or its "turf" and budgets, and is not inclined to share them with other sectors. In

1992 by the U.N. Conference on Environment and Development (UNCED), the "Earth Summit," and subsequently by the U.N. General Assembly.¹⁸

Most recently, the environmental norms fundamental to sustainable development have been restated in a soft law instrument, known as the "Earth Charter." In 1992, when delegates failed to adopt a proposal for an Earth Charter at UNCED's Earth Summit,¹⁹ an independent, non-governmental effort was launched to prepare such a statement.²⁰ After a decade of consultations throughout the world,²¹ the Earth Charter Commission published a final text of a proposed Earth Charter. Many local authorities and some States have endorsed the Earth Charter.²² The Council of IUCN endorsed the Earth Charter in 2003,²³ and recommended it to the IUCN World

order to achieve agreement at UNCED, the diplomats found it necessary to drop from Agenda 21 the estimates of how much money it would take to build an inter-sectoral system for sustainable development. See the annotations in *AGENDA 21: EARTH'S ACTION PLAN* (Nicholas A. Robinson et al. eds., 1993).

18. G.A. Res. 47/190, U.N. GAOR, Supp. No. 49, at 141, U.N. Doc. A/47/49 (1992).

19. Maurice Strong, the Secretary General for UNCED, advocated the preparation of an Earth Charter. When the delegates found it difficult to agree on any written Declaration of Principles in April of 1991, the Chairman of the Preparatory Committee for UNCED, Ambassador Tommy Koh (Singapore), arranged for a drafting group to prepare a text for the Rio Declaration. Their text was ultimately adopted by UNCED without material changes. Given the pressure to complete the recommendations in Agenda 21, the delegates could not agree on a more elaborate set of principles in the time allotted to UNCED and its preparatory meetings. See generally, *AGENDA 21 AND THE UNCED PROCEEDINGS* (Nicholas A. Robinson et al. eds., 1992).

20. The Earth Council was constituted as a non-governmental organization, based in Costa Rica, to promote the recommendations of UNCED's Earth Summit and to advance further agreements, such as the preparation of the Earth Charter, available at <www.earthcharter.org> (visited Sept. 11, 2003). The Earth Charter Commission was initially under the Earth Council, and became associated with the U.N. University for Peace, based in Costa Rica, in 2003.

21. These included town meetings with the public in all regions of the world, meetings at universities, and meetings with various governmental and non-governmental organizations. See, e.g., *HUMAN RIGHTS, ENVIRONMENTAL LAW, AND THE EARTH CHARTER* (Helen Marie Casey & Amy Morgante, eds., 1998). The IUCN Commission on Environmental Law convened meetings of its Environmental Ethics Specialist Group, in cooperation with The Hastings Institute, in 2000, to refine the final text of the Earth Charter.

22. See the Earth Charter's web site for the current roster of endorsements at various governmental and non-governmental levels, available at <www.earthcharter.org/endorse/endorsees.cfm> (visited Sept. 11, 2003).

23. Decision C/58/46 of the Council of IUCN, 58th Meeting of the IUCN Council, June 2-4, 2003, Gland, Switzerland.

Conservation Congress to be held in Bangkok, in November 2004. The Earth Charter is appended to this article.²⁴ The importance of these developments was underscored by the adoption of the Johannesburg Plan of Implementation (Johannesburg Plan), by the U.N. World Summit on Sustainable Development (WSSD), which states that ethics is fundamental to sustainable development.²⁵

The environmental principles restated in these soft law instruments have been arrived at over thirty years of diplomatic negotiations, and vigorous enactment of national legislation over the same period. The Earth Charter is the most comprehensive restatement of these principles, deriving the norms from a close study of their acceptance in international law. In turn, the restatement of these principles has begun to find its way into treaties, new "hard law" instruments. The African Union has negotiated and adopted revisions to the 1968 African Convention on Nature Conservation in 2003 (the Convention).²⁶ This treaty reflects the intellectual contribution of the IUCN Draft Covenant on Environment and Development (the Draft Covenant), prepared by the IUCN Commission on Environmental Law, and endorsed by the IUCN World Conservation Congress.²⁷ The Draft Covenant was released at the 50th Anniversary of the United Nations, at a Conference on Public International Law at U.N. headquarters in New York, and has been recently revised to reflect the consensus reached at WSSD.²⁸ The U.N. Economic Commission for Europe sponsored the

24. See Appendix, *infra*.

25. Johannesburg Plan of Implementation, adopted September 4, 2002, at the WSSD, U.N. Doc. A/CONF.199/20, at para. 6, available at <www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm> (visited Nov. 10, 2003) [hereinafter Johannesburg Plan].

26. The African Union, which replaced the Organization of African Unity, is a Pan-African economic and political integration organization of nations. The Convention, for which IUCN's Environmental Law Programme provided technical legal support in its drafting, is available through the IUCN web page at <www.iucn.orh/themes/law> (visited Oct. 12, 2003).

27. IUCN Draft Covenant on Environment and Development, launched on March 13-17, 1995, at the U.N. Congress on Public International Law, commemorated the 50th anniversary of the United Nations. IUCN published the text as *Draft International Covenant on Environment and Development, Environmental Policy and Law Paper No. 31* (2d ed. 2000), at <www.iucn.org/themes/law/info04.html> (visited Nov. 10, 2003).

28. See the revised edition of *Draft Covenant on Environment and Development* (forthcoming 2003). Available from the IUCN Environmental Law Centre, 108-112 Godesburger Allee, D-53175 Bonn, Germany.

negotiation and ratification of the Åarhus Agreement on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Åarhus Agreement or Agreement) on June 25, 1998,²⁹ which provides procedural norms for ensuring that the environmental principles will be observed.

The norms contained in the Earth Charter reflect judgments derived from many international agreements, in both hard and soft law. Professor Stephen Rockefeller, who diligently serves as the principles draftsman for the Earth Charter, has prepared an analysis of how these norms combine and reflect an international consensus about how humans should relate to and respect the natural environment. Not every nation's environmental laws contain each of these norms, nor do all of the multilateral environmental agreements and other treaties. These laws were adopted over time, and constitute separate steps toward a gradual acceptance of the various norms in the Earth Charter.

When discussing enforcement of environmental norms, the Earth Charter may be considered to be a restatement of the collective environmental norms, which are variously reflected in the environmental laws that nations have adopted over the past three decades. Each of the treaties and statutes and decisions comprising environmental law in some way reflects aspects of the norms restated in the Earth Charter. When examining the enforcement of environmental norms, therefore, it is important to define from what sources those norms arise. Both the Earth Charter and the formally adopted laws express the legal duty set out in an international agreement or statute, and the underlying environmental ethic that gives the norm both the immediacy and the reinforcement of being part of a holistic construct of inter-related norms. Each of the norms expressed in several clauses of the Earth Charter is more than just what its words express, because it is related to the other norms set forth. These norms do not exist because they are expressed in the Earth Charter; rather, they reflect norms that derive from experience about humanity's relationship with Earth's natural systems.³⁰ The

29. Åarhus Agreement on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25, 1998, 38 I.L.M. 517, available at <www.unece.org/env/pp> (visited Nov. 10, 2003) [hereinafter Åarhus Agreement]. See also *The Åarhus Convention: An Implementation Guide*, available at <www.unece.org/env/pp/acig.htm> (visited Nov. 10, 2003).

30. The Earth Charter restates principles already embraced in other legal instruments. It does not purport to determine that the principles are derived from a

Earth Charter is presently soft law, but it contains the jurisprudential foundation for *all* environmental law. The Earth Charter makes plain why environmental law enforcement is essential, and needs to be accorded a priority above laws that embrace more instrumental values, such as international free trade agreements.³¹ Observing environmental norms is the basis for sustaining life on Earth, and the enforcement of these norms is essential for attaining and maintaining a high quality of life on Earth.

The Framework in Which Environmental Norms Are Enforced Internationally

Having reviewed what is meant by environmental norms, one can examine some aspects of their enforcement, through both traditional juridical means and through diplomacy. While promulgation of environmental norms is done separately through national and international legal instruments, the enforcement of each is a national function. National environmental laws are enforced through domestic regimes of administrative, civil and criminal sub-regimes, for which international diplomatic cooperation aims at the harmonization of the rules to assure consistent and effective observance of comparable environmental norms. International environmental laws

natural rights philosophy or a religious commitment, although support for the norms of the Earth Charter can be found in both philosophical and religious persuasions. Nonetheless, the Earth Charter should not be dismissed as merely a positivist restatement of what nations have decided to enforce. The Earth Charter is a restatement of the norms that have, in fact, evolved, and that have proven necessary to provide the basis for sustainable development. As with most laws, if a society understands the need for the law and has embraced the values the law represents, then society will observe the laws and support their enforcement against those who neglect or reject the laws.

31. The free trade regime established by the World Trade Organization has been criticized as being hostile to environmental protection. There is much literature on the apparent conflicts between environment and trade. There are, however, constructive steps to ensure that environmental protection and fair and free trade agreements can be a part of the rule of law. *See, e.g.,* Appendix, *supra* note 24, para. 141. In response to these criticisms, revisions have been introduced into liberalized bilateral trade agreements. *See* U.S.–Singapore Free Trade Implementation Act, H.R. 2739, 108th Cong. (2003) (approved July 31, 2003). Chapter 18 of the agreement includes provisions for a bilateral environmental cooperation committee to oversee the recognition and identification of environmental norms under each nation's laws, and how to observe these norms, rather than allowing free trade practices to treat environmental rules as barriers to trade. The agreement becomes effective January 1, 2004, and the bilateral environmental negotiations under it may establish procedures to ensure that environmental law enforcement is not obstructed by liberalized trading practices, and vice versa.

are enforced principally through the same national regimes, for which international diplomatic cooperation is pursued to coordinate the patterns of national implementation and to assist in building the capacity of different nations to do so.

While many nations have signed and ratified multilateral environmental agreements, or adhered to the U.N. Convention on the Law of the Sea with its environmental norms in Part XII, these international norms are not self-executing and many nations must enact national environmental legislation to give the agreements domestic effect. Beyond these internationally-encouraged norms, far larger bodies of environmental norms are independently enacted within each nation. There are many examples of successful implementation, observance and enforcement of environmental norms embraced independently by nations. One widely accepted illustration is the establishment of national parks in every nation of the Earth.³² Park legislation is not mandated by any treaty, but is merely encouraged through cooperative programs such as the IUCN's World Commission on Protected Areas.³³ Another example is the widespread and recurring adoption of environmental impact assessment (EIA) procedures in nations around the world.³⁴ National legislatures have found the EIA procedures essential to avoid unintended, adverse environmental impacts that can accompany new development. Yet another illustration of recurrent, separate decisions to enact comparable norms is the pervasiveness of national laws to curb pollution of surface waters.

Since most—if not all—environmental law is implemented through procedures of domestic administrative law, the effectiveness of environmental law can be gauged by the strength of a nation's rule of law and the integrity of its administrative law regime. The nations assembled at the U.N. World Summit on Sustainable Development expressed their support for this objective succinctly: "Promoting the rule of law and strengthening of governmental institutions."³⁵

32. See, e.g., NATIONAL PARKS, CONSERVATION, AND DEVELOPMENT (Jeffrey A. McNeely & Kenton R. Miller eds., 1984) on the reports of the IUCN World Parks Congress resulting from the 1982 World Parks Congress in Bali, Indonesia.

33. The work of the WCPA can be viewed at <www.iucn.org/themes/protectedareas> (visited Oct. 12, 2003).

34. See Nicholas A. Robinson, *EIA Abroad: The Comparative and Transnational Experience*, reprinted in ENVIRONMENTAL ANALYSIS: THE NEPA EXPERIENCE 679 (Stephen G. Hildebrand & Johnnie B. Cannon, eds., 1992) [hereinafter *EIA Abroad*].

35. Johannesburg Plan, *supra* note 25, para. 139(e). The Johannesburg

As an example, the strength of the American administrative law regime, under the Administrative Procedure Act (APA),³⁶ has been instrumental in the enforcement of environmental norms. The APA brought order to agency rule-making (a quasi-legislative process)³⁷ and licensing decision-making (a quasi-judicial process).³⁸ Together with the Freedom of Information Act (FOIA),³⁹ which opened government decision-making to the public, the APA facilitated judicial review of administrative agency decision-making, also mandated by the statute.⁴⁰ The APA and FOIA made possible the early citizen suits to enforce the National Environmental Policy Act (NEPA),⁴¹ and these suits, in turn, inspired the enactment of citizen suit provisions in many of the national environmental statutes adopted by Congress.

Without an effective administrative law framework in each nation, there is little to no way for the public, through stakeholders such as fishermen or hikers and campers, or through public interest nongovernmental organizations, such as those in the United States like the Natural Resources Defense Council, EarthJustice or Environmental Defense, to take direct action to enforce environmental norms. The implementation of EIA illustrates these points. Effective enforcement in all regulatory fields depends upon respect for the rule of law, honest judicial review and acceptance of the sort of administrative law provisions that are embodied in the APA and FOIA. There is not likely to be enough police, investigators, engineers, prosecutors, administrative tribunals and other officers to ensure enforcement of all environmental laws. Just as the public is expected to observe environmental norms, the public needs to be empowered to secure enforcement by the government of those norms when others disobey them. Over the past thirty years, new techniques, such as the widespread enactment of EIA and the broader processes such as the APA and FOIA, have been fashioned,

Declaration on Sustainable Development also stressed, "We undertake to strengthen and improve governance at all levels for the effective implementation of Agenda 21, the Millennium development goals, and the Plan of Implementation of the Summit." See Johannesburg Declaration, *supra* note 4, para. 30.

36. 5 U.S.C. §§ 551-559 (2001).

37. 5 U.S.C. § 553 (2001).

38. 5 U.S.C. § 554 (2001).

39. 5 U.S.C. § 552 (2001).

40. 5 U.S.C. §§ 701-706 (1994).

41. 42 U.S.C. § 4321 (2001). See *Calvert Cliffs Coordinating Committee v. Atomic Energy Commissions*, 449 F.2d.1109 (D.C. Cir. 1971).

at national⁴² and international levels.⁴³ EIA illustrates how a set of environmental norms, expressed in legal procedures,⁴⁴ can be enforced. Since EIA is widely re-enacted across most nations, it illuminates how EIA, combined with access to information and provisions for judicial review, provide the essential foundation for enforcement actions nationally and internationally.⁴⁵

While EIA procedures are widespread, government officials or development interests do not yet warmly embrace them. An array of forces still resists enacting—or enforcing—environmental law. Inertia, “business as usual,” ecological illiteracy or antagonistic vested interests will retard such efforts to enhance enforcement.⁴⁶ Implementation of EIA procedures, and environmental enforcement generally, has been rather slow in coming in many regions of the Earth. The norms have been agreed to in treaties and incorporated into statutes, but they are not well observed. Governments are slow to train personnel or to allocate the funds needed for enforcement, and procedures are often needed to induce such enforcement. Even where administrative law systems are advanced, there is rarely provision for citizen suit enforcement of environmental laws, as is available in the United States.⁴⁷

As a means to strengthen the administrative law framework that is so essential for the effectiveness of environmental law, nations across Europe have negotiated and agreed to the Åarhus Agreement, which makes “access to justice” one of its fundamental procedural requirements.⁴⁸ Where observance of environmental laws is urgently required, so as to prevent the extinction of a species or avert an

42. The first of such laws, the National Environmental Policy Act of 1969 in the United States, 42 U.S.C. § 4232 (2001), is enforced by judicial review through the Administrative Procedure Act. States have enacted comparable systems, such as the California Environmental Quality Act (CEQA) or New York’s State Environmental Quality Review Act (SEQRA).

43. See Åarhus Agreement, *supra* note 29; Espoo Convention on Environmental Impact Assessment in a Transboundary Context, February 25, 1991, 30 I.L.M. 800 (1991) [hereinafter Espoo Convention], available at <www.unece.org/env/eia/eia.htm> (visited Oct. 12, 2003).

44. The principles in Section 101 of NEPA, 42 U.S.C. § 4321 (2001), are reflected in the environmental effects that are assessed through the procedures of Section 102(2)(C).

45. See *EIA Abroad*, *supra* note 34.

46. See Nicholas A. Robinson, *Legal Systems, Decisionmaking and the Science of Earth’s Systems*, 27 *ECOLOGICAL LAW QUARTERLY* 1077, 1125–31 (2001).

47. See, e.g., U.S. Clean Water Act § 505, 33 U.S.C. § 1365 (2001).

48. Åarhus Agreement, *supra* note 29.

explosion at a pesticide manufacturing factory,⁴⁹ rigorous and prompt enforcement of the law may be required, and there may not be time to educate or persuade those who violate the law to come into compliance. In such instances, there will need to be a way to leverage the enforcement into being in a visible and persuasive way, so that compliance with environmental norms is realized. When administrative agencies do not act in a timely way, the role of the judiciary is to take the appropriate action to ensure that the environmental laws are observed. If executive agencies do not invoke this judicial capacity, then public interest groups need to do so. All governmental authorities need to understand and appreciate the need for environmental enforcement, and that their failure to enforce environmental laws can result in others acting to prevent their default from causing irreparable damage. The alternative to allowing citizens to directly enforce environmental laws in courts is hardly palatable. Eco-catastrophes occur, and the public outrage at the damages resulting from the violation of environmental norms often induces stricter political sanctions than normal enforcement would have required.

Enforcing Norms Among Nations

International enforcement of environmental laws can be viewed from two perspectives: separate national enforcement of national norms in concert with others, and national enforcement of agreed international norms. From the first perspective, it is evident that there is a wide congruence among the environmental norms independently enacted within most nations. As each nation implements and enforces its own environmental law, it can be viewed as serving the parallel interests of all other nations' similar laws. Thus, when a nation prevents the release of a long-lasting, non-biodegradable chemical into waterways, the atmosphere or other natural pathways, that nation is safeguarding all nations from the dissemination of, bio-accumulation of and exposure to any deleterious effects of the chemical. Similarly, when a nation protects the habitat of a migratory bird, mammal, fish or insect, it is protecting a shared ecological interest. The discipline of comparative law can be used to study how nations enact and enforce environmental laws in

49. See the discussion of the Bhopal tragedy in ARMIN ROSENCRANZ ET AL., *ENVIRONMENTAL LAW AND POLICY IN INDIA: CASES MATERIALS AND STATUTES* (2d ed. 2001).

essentially similar ways.⁵⁰

Such national enforcement of parallel laws is an essential element of international cooperation among nations. While enforcement is an independent act, it can be conducted in collaboration with others. The duty of nations to cooperate is a recognized principle of international law.⁵¹ When nations support and participate as constituent members in the environmental law capacity-building projects of the IUCN or the UNEP, they are observing this principle. International cooperation is essential to help all nations develop their enforcement capabilities,⁵² and the U.S. Environmental Protection Agency undertakes significant programs to this end.⁵³ Equally, when a nation enforces its environmental laws locally or nationally, it expects other nations to do so as well. Even when

50. See COMPARATIVE ENVIRONMENTAL LAW AND REGULATION (Nicholas A. Robinson ed., 1996). The framework of environmental law in the United States is similar to that of other nations. For instance, in the United States, since 1970, Congress has enacted (a) the historic National Environmental Policy Act of 1969, (b) environmental quality or pollution laws (e.g. the Clear Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act, the Pollution Prevention Act, and The Oil Pollution Act) and (c) natural resources laws, (e.g. the Wilderness Act, the Endangered Species Act, the Forest and Rangeland Renewable Resources Planning Act, the Coastal Zone Management Act, and the Surface Mining Control and Reclamation Act), which complement the Progressive Era laws on natural resources such as the Organic Act for the National Parks Service, the Federal Power Act of 1920, the Soil Conservation Act, and others.

51. The U.N. Charter provides among its purposes "To achieve international co-operation in solving international problems of an economic, social, cultural or humanitarian character . . ." In Article 2(5), U.N. Members agree to "give every assistance in any action it takes in accordance with the present Charter." Available at <www.un.org/aboutun/charter> (visited Oct. 12, 2003).

52. In the United States, enforcement of early environmental norms came gradually. For instance, the Rivers & Harbors Act of 1899, known as the "Refuse Act," 30 Stat. 1152, et. seq., 33 U.S.C. § 407 (1964), was enforceable by U.S. Attorneys in federal district courts. A bounty of fifty percent of the penalty was paid to the citizen who caught the polluter and turned the evidence over to a U.S. Attorney. Enforcement of federal conservation laws in the public domain initially met fierce opposition. See, e.g., *Light v. United States*, 220 U.S. 523 (1911). It is not unusual for nations with younger environmental laws to find that their enforcement programs are under-financed and hobbled by opposition. The environmental legislation in Indonesia is sound, but corruption and cronyism in government preclude much enforcement.

53. The U.S. Environmental Protection Agency undertakes a wide range of international programs for cooperation in developing and implementing environmental norms. See, generally, *Role of EPA's Office of International Affairs*, available at <www.epa.gov/international/about/roleofioa.html> (visited Oct. 12, 2003).

enforcement officials consider that they are only acting within the focus and narrow ambit of their own national environmental law, they serve wider purposes. The natural systems that their legal norms would protect constitute a part of natural systems that operate in other countries, and are a part of the biosphere. From this perspective, national enforcement thus provides a global service.

Another principle of international law reinforces this perspective that national environmental enforcement serves international ends. Principle 21 of the Stockholm Declaration is acknowledged as a general principle of international law that nations are obliged to respect.⁵⁴ Where an action in one nation can impact adversely the environment in another nation, or in the commons of the high seas or atmosphere, the nation allowing the action has a duty to avoid or minimize such impacts. Too often this principle is ignored because the impacts in the other nation are not identified or known. Even when the impacts are known, the lack of capacity to enforce the environmental laws in one country can continue to cause harm in another, as is evident from the forest fires in Indonesia, started illegally to clear forest land for palm oil plantations, which pollute the air in Malaysia, Singapore, Brunei or the Philippines.⁵⁵ As the monitoring of environmental conditions improves,⁵⁶ these impacts will become ever more evident, and there will be greater urgency for enforcing environmental laws to prevent such transnational adverse environmental impacts.

In order to build an awareness that the actions in one nation affect nature in other nations, or in the international commons, there

54. See Principle 21, *supra* note 11.

55. See Nicholas A. Robinson, *Forest Fires as a Common International Concern: Precedents for the Progressive Developments of International Environmental Law*, 18 PACE ENVTL. L. REV. 459 (2001); Alan K.J. Tan, *Forest Fires of Indonesia: State Responsibility and International Liability*, 48 INT'L & COMP. L. Q. 826 (1999); Simon S.C. Tay, *The South-East Asian Forest Fires and Sustainable Development: What Should Be Done?*, 3 ASIA PAC. J. ENVTL. L. 205 (1998).

56. Monitoring is now possible by remote sensing, and by other satellite assisted technologies such as global positioning systems and satellite based infrastructure that now provides navigation and services to identify map locations for protected areas even in the most remote locations of the planet. The GPS developed by the United States is now to be complemented by the Galileo satellite constellation proposed by the European Union. Remote sensing satellites now provide real time photographs of events in protected areas anywhere in the world, as the NASA photos of the forest fires in Indonesia graphically demonstrated during the Southeast Asian "Haze" episodes in 1997-99. See web services of exemplary technology, available at <rapidfire.sci.gsfc.nasa.gov> (visited Nov. 10, 2003).

needs to be an administrative process by which governmental agencies, companies and other private actors, local authorities and other public actors and the public generally can come to understand the environmental impact of their actions, at home or abroad. With this awareness will come also the need for environmental enforcement. One of the earliest laws to build this awareness was the Federal Power Act of 1920 in the United States.⁵⁷ Section 10 of this Act⁵⁸ required an examination of all possible uses of waterways before the Federal Power Commission (FPC) could issue a permit for a dam or other hydroelectric power use. All competing uses of waterways—whether for navigation, fishing, recreation, aesthetic appreciation, or other uses—a careful empirical analysis of all these competing uses is needed before one can determine which use should be favored over another. When the FPC failed to comprehensively assess the competing demands for water on the Hudson River, at a location known as Cornwall, at Storm King Mountain, and preferred the application of Consolidated Edison Company, the local commercial electricity company, for a permit to construct a hydro-electric use, a consortium of local governments, hiking groups and public interest environmentalists, organized as the Scenic Hudson Preservation Conference, sought judicial review of the FPC's decision. The federal court of appeals ruled in favor of the citizen plaintiffs, remanding the case to the agency for further administrative proceedings.⁵⁹

As Judge Hays observed in the *Scenic Hudson* decision, to be licensed by the FPC, a prospective project must meet the statutory test of being

best adapted to a comprehensive plan for improving or developing a waterway. . . . In framing the issue before it, the [FPC] properly noted: "We must compare the Cornwall project with any alternatives that are available. If on this record Con Edison has available an alternative source for meeting its power needs which is better adapted to the development of the Hudson River for all beneficial uses, including scenic beauty, this application should be denied." If the [FPC] is properly discharging its duty in this regard, the record on which it bases its determination must be complete.⁶⁰

57. 16 U.S.C. § 825l(b) (2003).

58. 16 U.S.C. § 803(a) (2003).

59. *Scenic Hudson Preservation Conference v. Fed. Power Com.*, 354 F.2d 608 (2d Cir. 1965).

60. *Id.* at 614.

Judge Hays noted that the examination of alternatives is an affirmative duty. "This role does not permit [the FPC] to act as an umpire blandly calling balls and strikes for adversaries appearing before it; the right of the public must receive active and affirmative protection at the hands of the Commission."⁶¹

On remand, the FPC developed a complete record, and since alternatives to the proposed facility were found to exist, the permit was denied. If sustainable development norms are to be attained, this sort of dispassionate study of alternatives is essential. The logic of "look before you leap" was sufficiently persuasive that this Federal Power Act model, as interpreted by the courts, became a precedent for the EIA procedures of requiring the examination of alternatives in Section 102(2)(c) of NEPA. The Federal Power Act had authorized judicial review of FPC decisions by interested parties, such as Scenic Hudson Preservation Conference.⁶²

Authorizing citizens to have direct recourse to the courts, as the judicial review of agency action, has an older precedent in U.S. jurisprudence. This sort of direct action by citizens and environmental non-governmental organizations, which became the hallmark of cases brought to compel compliance with NEPA, reflects an earlier pattern of stakeholder enforcement. EIA enforcement is analogous to the direct enforcement actions authorized under the Sherman Antitrust Act or the Securities Acts. While government enforcement is provided for, so also was direct action by citizens. The Securities Act, for instance, ensured transparency in company decisions that were material to investors, and allowed investor law suits in effect to enforce such provisions. The Scenic Hudson Preservation Conference was a precedent Congress considered in enacting Section 102(2)(c) of NEPA, which requires examining all significant environmental impacts that could affect the quality of the environment. The practice under EIA offers an illustrative case study about how national and international environmental norms are inevitably intertwined and afford opportunities for enforcement actions.

NEPA⁶³ has served as a model for counterpart laws within the United States, within the states and provinces of other federations (notably Australia and Canada) and in other nations. Over 170

61. *Id.* at 620.

62. *See* 16 U.S.C. § 825l(b), *supra* note 57.

63. *See* 42 U.S.C. § 4321, *supra* note 41.

different states, provinces and nations have enacted EIA legislation. EIA is required in the New York State Environmental Quality Review Act (SEQRA), in some fifteen other States, in all Canadian Provinces, under Canadian federal law and in Mexico at state and federal levels.⁶⁴ The significance of EIA for sustainable development internationally was endorsed by the UNCED at the 1992 Earth Summit in Rio de Janeiro.⁶⁵ Other administrative law provisions, needed to make EIA work well, were also endorsed by UNCED.⁶⁶ The European Union (EU) has required that its members enact legislation for EIA since 1985: "Member States shall adopt all measures necessary to ensure that, before consent is given, projects likely to have significant effects on the environment by virtue, *inter alia*, of their nature, size or location are made subject to an assessment with regard to their effects."⁶⁷ As a result of the EU's EIA Directive, EIA is widely required in the "accession" states to the EU, those nations in Central and Eastern Europe that will join, or wish to join the EU.

The EIA process, however, is far wider than just that influenced by the EU. In the early 1970s, the Soviet Union adopted, and the Russian Federation continues to require "ecological expertise," a kind of EIA instituted at the end of the Soviet Union and continued

64. *EIA Abroad*, *supra* note 34.

65. See Rio Declaration, *supra* note 16. Principle 17 of the declaration provides: "Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority."

66. See Rio Declaration, *supra* note 16. Principle 19 of the declaration provides that "States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith." This Principle has been implemented in treaty provisions. See U.N. Economic Commission for Europe, Espoo Convention, *supra* note 43. The United States and Canada have a memorandum of understanding on the application of Canadian and U.S. national EIA laws to activities along the border (Ref.: President's Council on Environmental Quality). Although there is a Transboundary EIA Memoranda of Understanding, arranged through CEQ, for the United States and Mexico and the United States and Canada, as yet there is no agreement on transboundary EIA as yet exists for the Beringian border between the United States and Russia. 20th Annual report, for the Year 1989, together with the President's Message to Congress, Annual Reports of the Council on Environmental Quality, Executive Office of the President, Chapter 20, "International Issues," 259-321, and Appendix C.

67. Council Directive 85/337 of June 27, 1985, on the Assessment of the Effects of Certain Public and Private Projects on the Environment, Art. 2(1), 1985 O.J. (L 175) 40.

and re-enacted by the Duma as a national requirement in Russia. Many other economies in transition require EIA, and the European Bank for Reconstruction and Development (EBRD) requires the use of EIA for its loans and projects in these regions.

EIA is often applied to areas outside the national jurisdiction that enacts EIA legislation. For instance, NEPA applies to U.S. federal agency decisions with impacts abroad in specified contexts.⁶⁸ Case law limits direct applicability of NEPA to the high seas and other international commons.⁶⁹ In 2002, the U.S. Navy challenged the applicability of the 1979 Executive Order 12114 to naval activities on the high seas, arguing that it could apply only to the twelve mile territorial seas of the United States. This unprecedented challenge to the President's implementation of NEPA was challenged by a public interest law firm, the Natural Resources Defense Council (NRDC), in the federal district court in Los Angeles, California.⁷⁰ Although the Navy's claims were contrary to the law, as interpreted by the President's Council on Environmental Quality, the Department of Justice nonetheless elected to defend the Navy's position in court. The Navy had sought to test elements of its Littoral Warfare Advanced Development Program in the exclusive economic zone, without complying with its duty to undertake an environmental impact assessment of its activities in compliance with NEPA. The district court, on cross motions for summary judgment, rejected the Navy's claims.⁷¹

International environmental law norms confirm the duty of the United States to conduct EIA for the high seas. An obligation to undertake EIA for acts impacting on the oceans is provided for under Article 206 of the U.N. Convention on the Law of the Sea.⁷² If the President submits this Convention to the Senate for ratification

68. Exec. Order No. 12114, 44 Fed. Reg. 1957 (Jan. 4, 1979).

69. See, e.g., *Environmental Defense Fund v. Massey*, 772 F.Supp. 1296 (D.D.C. 1991), *rev'd*, 986 F. 2d 528 (D.C. Cir. 1993) (involving National Science Foundation actions in Antarctica); *Public Citizen v. U.S. Trade Representative*, 5 F.3d 549 (D.C. Cir. 1993), *cert. denied* 510 U.S. 1041 (1994); *Greenpeace U.S.A. v. Stone*, 748 F.Supp. 749 (D. Haw. 1990).

70. See Katherine Q. Seelye, *U.S. Seeks to Limit Conservation Law*, N.Y. TIMES, August 10, 2002, at A1.

71. *Natural Resources Defense Council v. U.S. Dep't of the Navy*, 2002 WL 32095131 (C.D. Cal. Sept. 17, 2002); see the plaintiff's discussion of this matter at <www.nrdc.org/media/pressreleases/021003.asp> (visited Nov. 10, 2003).

72. U.N. Convention on the Law of the Sea, U.N. Doc. A/CONF.62/122, 21 I.L.M. 1261 (1982), available at <untreaty.un.org> (visited Oct. 12, 2003).

without reservations, the duty to apply NEPA to United States governmental activities on the oceans, including the exclusive economic zone and high seas, may enter into force.

EIA has wide application in developing nations. As noted above, EIA has been reaffirmed at the WSSD held in Johannesburg, South Africa, from August 26 to September 4, 2002. The Johannesburg Declaration reaffirmed the 1992 Rio Declaration, and called for enhanced capacity building in developing nations. The focus at the WSSD was on “responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection.”⁷³ EIA is widely perceived as a foundation for sustainable development.⁷⁴ Most developing nations have enacted EIA legislation.⁷⁵ A lack of scientific and technical resources in developing nations produces a set of generic problems with the implementation of the EIA legislation that is adopted. There is a lack of capacity to facilitate public participation, a lack of professional experience with EIA among government offices, a lack of funding provided for EIA, inadequate means of assembling environmental baseline data and a tendency toward result-oriented decision-making, favoring projects as proposed.⁷⁶ Capacity building among environmental lawyers and other environmental professionals is essential to furthering EIA.⁷⁷

73. See Johannesburg Declaration, *supra* note 4; U.N. GAOR, 57th Sess., Agenda Item 13, U.N. Doc. A/Conf.199/L.6/Rev.2 (2002).

74. See *Environmental Impact Assessment and Planning*, in 1 CAPACITY BUILDING FOR ENVIRONMENTAL LAW IN THE ASIAN AND PACIFIC REGION 545 (Donna Craig, et.al. eds., Asian Development Bank 2002).

75. See Marceil Yaeter & Lal Kurukulasuriya, *Environmental Impact Assessment Legislation in Developing Countries*, in UNEP'S NEW WAY FORWARD: ENVIRONMENTAL LAW AND SUSTAINABLE DEVELOPMENT 257 (Sun Lin ed., 1995); see also Jeff F. McCormick, *Implementation of NEPA and Environmental Impact Assessment in Developing Nations*, in ENVIRONMENTAL ANALYSIS: THE NEPA EXPERIENCE 716 (Stephen G. Hildebrandt & Johnnie B. Cannon eds., 1993).

76. See generally AVIJIT GUPTA & MUKUL G. ASHER, ENVIRONMENT AND THE DEVELOPING WORLD: PRINCIPLES, POLICIES AND MANAGEMENT 239-243 (1998).

77. See Fola S. Ebisemiju, *EIA: Making it Work in Developing Countries*, 38 J. ENVTL. MGMT. 247, 247-273 (1993). “Although progress in the adoption of EIA as an environmental management tool has been extremely slow in the developing countries because of largely technical issues, there is now a heightened awareness among these countries of the potential benefits of the EIA system in the few countries that have so far established administrative machineries and legal instruments for the implementation of EIA, however, the performance outcome of the system has been extremely poor.” *Id.*

EIA is also required by multilateral lending institutions, for their loans and activities in developing nations and in the economies in transition in nations that formerly relied upon central planning.⁷⁸ The regional development banks, such as the Asian Development Bank, have assisted nations in their area to build their capacity to undertake EIA.⁷⁹ There are a great many other applications of EIA, for developed and developing nations alike, as well as for intergovernmental organizations. For instance, the use of EIA, with social impact assessment, is especially relevant for projects affecting indigenous peoples and traditional local communities.⁸⁰

Despite its widespread application, the procedures for EIA remain quite disparate. There is no agreement on a common methodology for implementing EIA; nor is there a uniform process to ensure widespread public participation in the preparation of EIA, access to and dissemination of the documents prepared for EIA, or access to the courts for judicial review of an EIA process. This retards and often prevents effective enforcement of EIA procedures. In order to bring the necessary administrative law reforms to bear within such nations, the nations within the U.N. Economic Commission for Europe sponsored the negotiation of an international agreement. The Århus Agreement,⁸¹ which entered into force on October 30, 2001, establishes the duty to undertake EIA on a Pan-European basis, including the nations with economies in transition among the fifteen former Soviet republics and the states of Eastern and Central Europe. This treaty also combines the EIA obligation with a duty to enact equivalent procedures to the U.S. APA, including access to justice through judicial review, and the FOIA.

Because the Århus Agreement is open to ratification by any nation in the world, and not just those in Europe, it is potentially a major tool for strengthening the enforcement of environmental law worldwide. In any discussion of environmental law enforcement

78. See, e.g., World Bank, *Environmental Assessment, World Bank Operational Manual: Operational Policies*, available at <<http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf>> (visited Nov. 10, 2003).

79. E.g. Asian Development Bank, *Environmental Considerations in ADB Operations, Operations Manual*, available at <www.adb.org/documents/manuals/operations/om20.asp> (visited Nov. 10, 2003).

80. See Donna Craig, *The Development of Social Impact Assessment in Australia and Overseas and the Role of Indigenous People, East Kimberly Impact Assessment Working Paper No. 31*, CRES, Australian National University (1989).

81. Århus Agreement, *supra* note 29.

internationally, therefore, it is important to understand the Åarhus Agreement.

The Åarhus Agreement

The impact of the Åarhus Agreement in fostering democratic decision-making, as well as environmental protection, is reflected by the reactions of European leaders to the entry into force of the agreement.⁸² The Åarhus Agreement promulgates through treaty law (hard law) the enactment of the soft law norms contained in Principle 17 (on EIA), and in Principle 10 (on public participation) of the Rio Declaration. Principle 10 provides a foundation for the Agreement:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.⁸³

In Article 4, "Access to Information," the Åarhus Agreement provides a right of access to information akin to the U.S. FOIA, 5 U.S.C. § 552, or the EU Council Directive of June 7, 1990, on the freedom of access to information on the environment.⁸⁴ This is a fundamental element of the reforms contained in the Åarhus Agreement.

In Åarhus Agreement Article 5, "Collection and Dissemination of Environmental Information," there is a broad provision that reflects the same sort of requirements of many of the federal substantive environmental statutes in the United States, such as the Clean Air Act or the Clean Water Act.

The heart of the EIA process in the Åarhus Agreement is in Article 6, "Public Participation in Decision of Specific Activities." This Article provides that the State shall inform the public of

82. UNECE Press Release, *Environmental Rights Not a Luxury* (Oct. 29, 2001), available at <www.unece.org/env/pp/press.releases/01env15e.html> (visited Oct. 12, 2003).

83. Åarhus Agreement, *supra* note 29, at princ. 10.

84. Council Directive 90/313/EEC, 1990 O.J. (L 158).

decisions for listed activities that are deemed to have environmental impacts (Annex I to the Agreement), and may provide notice for any other to whether or not to permit activities that "may have a significant effect on the environment." Article 6(2) sets out the required EIA notice procedures, and Article 6(3) to 6(11) provide the detailed provisions for EIA.

Article 7 provides that public participation is an essential requirement of the EIA provisions in Article 6. Article 8, "Public Participation During the Preparation of Executive Regulations and/or Generally Applicable Legally Binding Normative Instruments," is akin to the APA.⁸⁵

Judicial review is addressed by the Åarhus Agreement in Article 9. The fundamentally important requirements of "Access to Justice," mandate judicial review of EIA, and provide standing for persons seeking environmental information or "to challenge the substantive and procedural legality of any decision, act or omission subject to the provisions of article 6."⁸⁶ The Åarhus Agreement provides an environmental foundation to bolster the provisions for democratic procedures in Eastern European nations and the independent nations of the former Soviet Union. Citizen environmental activism becomes an essential element of further democracy and the rule of law. In Western Europe, acceptance of these procedures may come more gradually, since the Åarhus Agreement expands the 1985 EU EIA Directive and the national procedures already in place.

As the Åarhus Agreement is open for signature by any nation from any region in the world, it thus may become a multilateral environmental agreement of wider applicability. It may be adapted to use in other regions, such as the Association of Southeast Asian Nations (ASEAN).⁸⁷ Just as the APA, FOIA and NEPA ushered in a much enhanced capacity for environmental law enforcement in the United States, so the adherence to the provisions of the Åarhus Agreement will do the same in other nations. As the norms in most national legislation are generally congruent⁸⁸ and tend toward those

85. 5 U.S.C. §§ 551, 553 (1994).

86. Åarhus Agreement, *supra* note 29, at art. 9.

87. See generally, Koh Kheng Lian and Nicholas A. Robinson, *Strengthening Sustainable Development in Regional Inter-governmental Governance: Lessons from the 'ASEAN Way'*, 6 SING. J. INT'L L. 640 (2002).

88. Since EIA requires analysis of all environmental impacts, and implicates any other environmental laws that govern affected environmental resources, EIA enforcement will also complement and enhance observance and enforcement of

articulated in the Earth Charter, the exercise of the rights accorded to the public in the Åarhus Agreement will do much to advance observance of environmental norms. Environmental enforcement across all nations would be enhanced by adherence to the Åarhus Agreement.

Analysis of the effects of the Åarhus Agreement on environmental law enforcement can be examined through several related undertakings. Within the European Community, legislation for nature conservation, water pollution and most air pollution is well defined and harmonized, and the accession states now joining the EU are conforming their environmental laws to those of the EU (including the Directive on EIA). Progress in observing the environmental norms is projected and measured through Five Year plans, through which the EU promotes Union-wide enhancement of environmental priorities. In addition, these EU initiatives are furthered by separate initiatives, such as the Council for Europe's European Landscape Convention. EIA can address environmental impacts in areas where there is not yet national legislation. For instance, except for a law of limited application in the United Kingdom, European laws on remediation of soils contaminated with hazardous wastes have yet to be enacted. There is now law comparable to CERCLA in Europe.⁸⁹

The promise for administrative law reform is strong in regions

other environmental laws. The national environmental legislation in most countries is largely congruent with the U.S. pattern, and thus enforcement can follow similar patterns, and can also be enhanced by strengthening environmental ministries, building the capacity in local governments to apply and enforce the laws, and facilitating direct citizen legal action through EIA, and access to the courts. Moreover, in some regions, judicial acceptance of public interest litigation has advanced beyond what is permitted in the United States, and the United States could consider emulating some of the environmental law advances in place abroad. Sectoral environmental laws generally can be found for the following areas of human activity: air; water; flora; fauna; wildlife; hunting and fishing; domestic animals; endangered species; phytosanitary rules; public health; solid waste management; hazardous waste management; agriculture; soil conservation; silvaculture (forestry); bio-prospecting; aquaculture (commercial fishing); desertification; marine environment; oil and gas extraction; hard rock mining; energy generation and land use.

89. Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675 (1994); compare Japan's new law on soil protection, Soil Contamination Prevention Law (*dojyouosen-taisaku-hou*) Law No. 53, enacted in 2002; see also LYE LIN HENG, SECOND GENERATION OF ENVIRONMENTAL LAW (forthcoming 2003), available at <www.iucn.org/themes/law/info04.html> (visited Oct. 12, 2003).

other than Europe as well. In countries of South Asia,⁹⁰ as well as Australia⁹¹ and the Philippines, public interest litigation has been advanced in each nation's supreme court.⁹² For instance, in Australia, EIA can advance the strong framework legislation that integrates biodiversity norms into all decision making. The Australian federal biodiversity laws are more advanced than most, if not all nations laws on this subject. EIA procedures complement and make the observance of these norms more likely.⁹³ In New Zealand, the integration of all land use and environmental laws (except mining) into the New Zealand Resource Management Act of 1991, exceeds any such effort to codify and integrate environmental quality and land use laws in the United States.

Implications for Enforcing Environmental Norms Transnationally

As nations strengthen the administrative law framework for their environmental laws, through enhancing EIA procedures and providing access to judicial review, the opportunities for international environmental enforcement will grow. Given the congruence of laws such as EIA, there is no reason why nationals of one state cannot appear as plaintiffs in the courts of adjacent states to defend common environmental interests. A pattern of transnational environmental litigation would raise the profile of shared pollution or natural resources problems, and could stimulate diplomatic negotiations even if litigation offers only limited immediate remedies. Similarly, litigation in international tribunals tends to accelerate diplomatic negotiations to resolve environmental problems.

Through public participation in appropriate EIA proceedings, stake-holders could raise a wide range of environmental values, presented in treaties or statutes. Direct citizen suits in national courts can give rulings on issues such as protection of migratory species, spill-over environmental impacts of developments, or failures to

90. See, e.g., *Zia v. WAPDA*, (1994) 48 S.C. 693 (Pak.); see also, *Mehta v. Nath*, (1997) 1 S.C.C. 388 (India).

91. *Greenpeace Australia v. Redbank Power*, 1994 NSW LEXIS 13810 (unreported case, N.S.W. Land and Environment Court of Australia).

92. *Oposa v. Factoran*, 224 S.C.R. 792 (1993) (Phil.), reprinted in 33 I.L.M. 173 (1994).

93. See Australian Environmental Protection and Biodiversity Act of 1999, available at <http://bar.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/> (visited Oct. 12, 2003).

enforce bans on chemicals such as Persistent Organic Pollutants (POPs) under the Stockholm Convention on POPs.⁹⁴ The Alien Torts Claims Act in the United States is already used for violation of fundamental human rights, and could permit such suits for state sponsored environmental degradation.⁹⁵ For instance, Indonesia's failure to enforce laws against burning tropical forests, destroying habitat for endangered species and migratory species and causing "haze" or transboundary air pollution, could become the subject of stakeholder review by Indonesians and others from ASEAN member states.⁹⁶

Direct citizen action to present claims of criminal violations of environmental laws can lead to criminal enforcement. For instance, the IUCN-sponsored TRAFFIC⁹⁷ investigations, resulting for example in the U.S. Fish & Wildlife Service's complaints with prosecutions by the U.S. Justice Department for violations of the IUCN-inspired 1973 Convention on the International Trade in Endangered Species (CITES). This pattern is replicated for the black market trade in CFCs in violation of the Montreal Protocol and London Agreements, supplemental to the U.N. Convention on the Protection of the Stratospheric Ozone Layer and their implementation under the U.S. Clean Air Act. More such citizen-sponsored investigations could be linked to criminal sanctions across borders.

Beyond recourse to national courts, international tribunals may come to provide a forum for States to raise claims, although this seems unlikely. Most promising is the forum provided through the environmental chamber of the Hague Court of International Arbitration (also open to non-State parties, if States agree to the arbitral forum). For nations, there is the environmental chamber of the International Court of Justice (ICJ) in the Hague, or the environmental chamber of the Law of the Sea Tribunal in Hamburg, for matters involving Part XII of the U.N. Convention on the Law of

94. For the text of the convention, see <www.pops.int> (visited Nov. 10, 2003). This treaty, awaiting entry into force, is thoroughly analyzed in MARCO OLSEN, ANALYSIS OF THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS (2003).

95. Alien Tort Statute (or Alien Torts Claims Act), 28 U.S.C. § 1350 (2001).

96. For the work TRAFFIC undertakes to secure enforcement internationally of wildlife laws, including violations of the Convention on the International Trade in Endangered Species (CITES) see <www.traffic.org> (visited Oct. 12, 2003).

97. TRAFFIC is the implementing agency for CITES. It is a "wildlife trade monitoring network [that] works to ensure that trade in wild plants and animals is not a threat to the conservation of nature." See <www.traffic.org>.

the Sea. Most recently, the U.N. Criminal Court under the Statute of Rome, provides opportunities for enforcement against individuals in States whose violations of environmental norms are extreme. Even where the claims may not lead to judicial remedies, they can lead to diplomatic negotiations. Ad hoc arbitral tribunals⁹⁸ can be demanded; citizens and local governments can press claims for transboundary pollution harm, harm to migratory species through loss of habitat or unlawful takings or excessive harvests, and the political pressure can build to require diplomatic negotiations, and dispute settlement measures. Enacting local laws alone is unproductive. While there may be opportunities to press environmental claims in international tribunals, most enforcement will be at the national level. Any delay in implementing national access to justice will leave the most activist stakeholder to take direct action outside the law, which is hard to support in terms of sustainable development values.⁹⁹ A strategic sense of what the law can do is needed, and intervention in national EIA and national judicial reviews will be more likely than in international tribunals for some time to come.

Across nations, several international organizations operate to enhance national application of international norms. For instance, the International Committee of the Red Cross (ICRC) can pursue environmental violations of international humanitarian law, and national stakeholders can advance such efforts. The IUCN can use its unique niche to advance diplomatic consultations among nations, e.g. talks between IUCN members in North and South Korea about the fate of the biodiversity in the demilitarized zone, or the harmonization of pollution laws and natural resource degradation laws between the two Koreas. IUCN has already undertaken comparable efforts in its Parks for Peace initiatives, such as settling the Ecuador/Peru boarder conflict by establishing an international peace park. IUCN can also seek wider international recognition and national enforcement of the fundamental environmental norm expressed in the Amman Declaration,¹⁰⁰ adopted by the Second

98. See, e.g., *Trail Smelter Case* (U.S. v. Can.), 3 R.I.A.A. 1905 (1938).

99. Direct action, unrelated to a legal mechanism, makes for good press, but produces little legal enforcement or diplomatic negotiations to resolve environmental problems (for instance, the nongovernmental organization Greenpeace's direct action to disrupt shipments of nuclear waste or to physically disrupt the taking of marine mammals). The legal framework for civil disobedience does not exist in many nations or internationally.

100. *A Marten's Clause for Environmental Protection*, IUCN Second World

World Conservation Congress of IUCN:

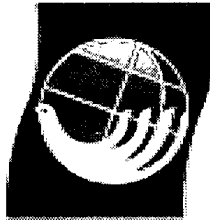
Until a more complete international code of environmental protection has been adopted, in cases not covered by international agreements and regulations, the biosphere and all its constituent elements and processes remain under the protection and authority of the principles of international law derived from established custom, from dictates of the public conscience, and from the principles and fundamental values of humanity acting as steward for present and future generation.

The environmental norms, as expressed in the Earth Charter, are becoming an international standard. Their observance is increasingly expected, and their enforcement will become more widespread. Norms without access to justice may not be realized. Like Archimedes, those seeking environmental enforcement need to find the place to stand and the lever to move the world. Internationally, such a platform remains to be strengthened. Absent such global leverage, enforcement must follow the 1972 maxim of Dr. René Dubos at the time of the U.N. Stockholm Conference on the Human Environment: “Think Globally and Act Locally.”

Internationally, enforcement of environmental norms is unavoidably a grassroots mission. Repeated efforts at enforcement within nations can be communicated instantaneously through the media and Internet around the world. Just as environmental norms recur in national legislation, so patterns of comparable national environmental enforcement will emerge as consistent and effective means of compelling compliance with international environmental norms. The accumulation of local enforcement is a form of *redoublement internationale*. Within each nation, the public interest enforcement initiatives or prosecution are effective means of giving effect to the international environmental norms.

In the end, enforcement of environmental norms within a shared biosphere is the duty of every unit of government or organized society. Within the present system of national states—that still provides the framework for international environmental law—enforcement of environmental norms is necessarily the responsibility of each nation, and each nation’s political subdivisions. Each is a link in a common chain.

Conservation Cong. Res. 2.97 (Oct. 2000).

APPENDIX**THE EARTH CHARTER****PREAMBLE**

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations.

Earth, Our Home

Humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution. The resilience of the community of life and the well-being of humanity depend upon preserving a healthy biosphere with all its ecological systems, a rich variety of plants and animals, fertile soils, pure waters, and clean air. The global environment with its finite resources is a common concern of all peoples. The protection of Earth's vitality, diversity, and beauty is a sacred trust.

The Global Situation

The dominant patterns of production and consumption are causing environmental devastation, the depletion of resources, and a massive extinction of species. Communities are being undermined. The benefits of development are not shared equitably and the gap between rich and poor is widening. Injustice, poverty, ignorance, and violent conflict are widespread and the cause of great suffering. An unprecedented rise in human population has overburdened ecological and social systems. The foundations of global security are threatened. These trends are perilous—but not inevitable.

The Challenges Ahead

The choice is ours: form a global partnership to care for Earth and one another or risk the destruction of ourselves and the diversity of life. Fundamental changes are needed in our values, institutions, and ways of living. We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impacts on the environment. The emergence of a global civil society is creating new opportunities to build a democratic and humane world. Our environmental, economic, political, social, and spiritual challenges are interconnected, and together we can forge inclusive solutions.

Universal Responsibility

To realize these aspirations, we must decide to live with a sense of universal responsibility, identifying ourselves with the whole Earth community as well as our local communities. We are at once citizens of different nations and of one world in which the local and global are linked. Everyone shares responsibility for the present and future well-being of the human family and the larger living world. The spirit of human solidarity and kinship with all life is strengthened when we live with reverence for the mystery of being, gratitude for the gift of life, and humility regarding the human place in nature.

We urgently need a shared vision of basic values to provide an ethical foundation for the emerging world community. Therefore, together in hope we affirm the following interdependent principles for a sustainable way of life as a common standard by which the conduct of all individuals, organizations, businesses, governments, and transnational institutions is to be guided and assessed.

PRINCIPLES

I. RESPECT AND CARE FOR THE COMMUNITY OF LIFE

1. *Respect Earth and life in all its diversity.*

- a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings.*
- b. Affirm faith in the inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity.*

2. *Care for the community of life with understanding, compassion, and love.*

- a. Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people.*
- b. Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.*

3. *Build democratic societies that are just, participatory, sustainable, and peaceful.*

- a. Ensure that communities at all levels guarantee human rights and fundamental freedoms and provide everyone an opportunity to realize his or her full potential.*
- b. Promote social and economic justice, enabling all to achieve a secure and meaningful livelihood that is ecologically responsible.*

4. *Secure Earth's bounty and beauty for present and future generations.*

- a. Recognize that the freedom of action of each generation is*

qualified by the needs of future generations.

- b. Transmit to future generations values, traditions, and institutions that support the long-term flourishing of Earth's human and ecological communities.*

In order to fulfill these four broad commitments, it is necessary to:

II. ECOLOGICAL INTEGRITY

5. *Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.*

- a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives.*
- b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage.*
- c. Promote the recovery of endangered species and ecosystems.*
- d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms.*
- e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems.*
- f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.*

6. *Prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary*

approach.

- a. Take action to avoid the possibility of serious or irreversible environmental harm even when scientific knowledge is incomplete or inconclusive.*
- b. Place the burden of proof on those who argue that a proposed activity will not cause significant harm, and make the responsible parties liable for environmental harm.*
- c. Ensure that decision making addresses the cumulative, long-term, indirect, long distance, and global consequences of human activities.*
- d. Prevent pollution of any part of the environment and allow no build-up of radioactive, toxic, or other hazardous substances.*
- e. Avoid military activities damaging to the environment.*

7. Adopt patterns of production, consumption, and reproduction that safeguard Earth's regenerative capacities, human rights, and community well-being.

- a. Reduce, reuse, and recycle the materials used in production and consumption systems, and ensure that residual waste can be assimilated by ecological systems.*
- b. Act with restraint and efficiency when using energy, and rely increasingly on renewable energy sources such as solar and wind.*
- c. Promote the development, adoption, and equitable transfer of environmentally sound technologies.*
- d. Internalize the full environmental and social costs of goods and services in the selling price, and enable consumers to identify products that meet the highest social and environmental standards.*
- e. Ensure universal access to health care that fosters reproductive*

health and responsible reproduction.

f. Adopt lifestyles that emphasize the quality of life and material sufficiency in a finite world.

8. Advance the study of ecological sustainability and promote the open exchange and wide application of the knowledge acquired.

a. Support international scientific and technical cooperation on sustainability, with special attention to the needs of developing nations.

b. Recognize and preserve the traditional knowledge and spiritual wisdom in all cultures that contribute to environmental protection and human well-being.

c. Ensure that information of vital importance to human health and environmental protection, including genetic information, remains available in the public domain.

III. SOCIAL AND ECONOMIC JUSTICE

9. Eradicate poverty as an ethical, social, and environmental imperative.

a. Guarantee the right to potable water, clean air, food security, uncontaminated soil, shelter, and safe sanitation, allocating the national and international resources required.

b. Empower every human being with the education and resources to secure a sustainable livelihood, and provide social security and safety nets for those who are unable to support themselves.

c. Recognize the ignored, protect the vulnerable, serve those who suffer, and enable them to develop their capacities and to pursue their aspirations.

10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable

manner.

- a. Promote the equitable distribution of wealth within nations and among nations.*
- b. Enhance the intellectual, financial, technical, and social resources of developing nations, and relieve them of onerous international debt.*
- c. Ensure that all trade supports sustainable resource use, environmental protection, and progressive labor standards.*
- d. Require multinational corporations and international financial organizations to act transparently in the public good, and hold them accountable for the consequences of their activities.*

11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.

- a. Secure the human rights of women and girls and end all violence against them.*
- b. Promote the active participation of women in all aspects of economic, political, civil, social, and cultural life as full and equal partners, decision makers, leaders, and beneficiaries.*
- c. Strengthen families and ensure the safety and loving nurture of all family members.*

12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities.

- a. Eliminate discrimination in all its forms, such as that based on race, color, sex, sexual orientation, religion, language, and national, ethnic or social origin.*
- b. Affirm the right of indigenous peoples to their spirituality,*

knowledge, lands and resources and to their related practice of sustainable livelihoods.

- c. Honor and support the young people of our communities, enabling them to fulfill their essential role in creating sustainable societies.*
- d. Protect and restore outstanding places of cultural and spiritual significance.*

IV. DEMOCRACY, NONVIOLENCE, AND PEACE

13. *Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.*

- a. Uphold the right of everyone to receive clear and timely information on environmental matters and all development plans and activities which are likely to affect them or in which they have an interest.*
- b. Support local, regional and global civil society, and promote the meaningful participation of all interested individuals and organizations in decision making.*
- c. Protect the rights to freedom of opinion, expression, peaceful assembly, association, and dissent.*
- d. Institute effective and efficient access to administrative and independent judicial procedures, including remedies and redress for environmental harm and the threat of such harm.*
- e. Eliminate corruption in all public and private institutions.*
- f. Strengthen local communities, enabling them to care for their environments, and assign environmental responsibilities to the levels of government where they can be carried out most effectively.*

14. *Integrate into formal education and life-long learning the*

knowledge, values, and skills needed for a sustainable way of life.

- a. Provide all, especially children and youth, with educational opportunities that empower them to contribute actively to sustainable development.*
- b. Promote the contribution of the arts and humanities as well as the sciences in sustainability education.*
- c. Enhance the role of the mass media in raising awareness of ecological and social challenges.*
- d. Recognize the importance of moral and spiritual education for sustainable living.*

15. *Treat all living beings with respect and consideration.*

- a. Prevent cruelty to animals kept in human societies and protect them from suffering.*
- b. Protect wild animals from methods of hunting, trapping, and fishing that cause extreme, prolonged, or avoidable suffering.*
- c. Avoid or eliminate to the full extent possible the taking or destruction of non-targeted species.*

16. *Promote a culture of tolerance, nonviolence, and peace.*

- a. Encourage and support mutual understanding, solidarity, and cooperation among all peoples and within and among nations.*
- b. Implement comprehensive strategies to prevent violent conflict and use collaborative problem solving to manage and resolve environmental conflicts and other disputes.*
- c. Demilitarize national security systems to the level of a non-provocative defense posture, and convert military resources to peaceful purposes, including ecological restoration.*

- d. Eliminate nuclear, biological, and toxic weapons and other weapons of mass destruction.*
- e. Ensure that the use of orbital and outer space supports environmental protection and peace.*
- f. Recognize that peace is the wholeness created by right relationships with oneself, other persons, other cultures, other life, Earth, and the larger whole of which all are a part.*

THE WAY FORWARD

As never before in history, common destiny beckons us to seek a new beginning. Such renewal is the promise of these Earth Charter principles. To fulfill this promise, we must commit ourselves to adopt and promote the values and objectives of the Charter.

This requires a change of mind and heart. It requires a new sense of global interdependence and universal responsibility. We must imaginatively develop and apply the vision of a sustainable way of life locally, nationally, regionally, and globally. Our cultural diversity is a precious heritage and different cultures will find their own distinctive ways to realize the vision. We must deepen and expand the global dialogue that generated the Earth Charter, for we have much to learn from the ongoing collaborative search for truth and wisdom.

Life often involves tensions between important values. This can mean difficult choices. However, we must find ways to harmonize diversity with unity, the exercise of freedom with the common good, short-term objectives with long-term goals. Every individual, family, organization, and community has a vital role to play. The arts, sciences, religions, educational institutions, media, businesses, nongovernmental organizations, and governments are all called to offer creative leadership. The partnership of government, civil society, and business is essential for effective governance.

In order to build a sustainable global community, the nations of the world must renew their commitment to the United Nations, fulfill their obligations under existing international agreements, and support the implementation of Earth Charter principles with an international legally binding instrument on environment and development.

Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the

quickenings of the struggle for justice and peace, and the joyful celebration of life.